

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
1 February 2001 (01.02.2001)

PCT

(10) International Publication Number  
**WO 01/07981 A2**

(51) International Patent Classification<sup>7</sup>:

G06F

(81) Designated States (*national*): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(21) International Application Number: PCT/US00/19937

(22) International Filing Date: 21 July 2000 (21.07.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/145,476 23 July 1999 (23.07.1999) US

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant and

(72) Inventor: RAJSIC, Goran [US/US]; 885 N. LaSalle, Chicago, IL 60615 (US).

Published:

— Without international search report and to be republished upon receipt of that report.

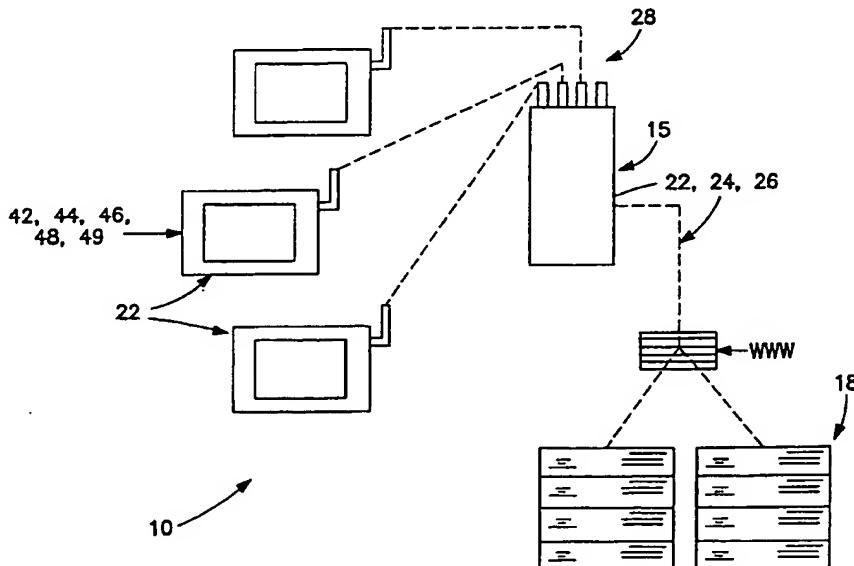
(74) Agents: JOVANOVIC, Jovan et al.; Factor and Partners, LLC, Suite 300, 100 West Monroe Street, Chicago, IL 60603 (US).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A SYSTEM AND METHOD FOR PROVIDING REMOTE ACCESS OF INFORMATION TO A USER IN A FAMILIAR CONFIGURATION



**WO 01/07981 A2**



(57) Abstract: A system and method of providing remote access of information to a user in a familiar configuration. The system comprises a remote server and a plurality of remote units. The method comprises the steps of obtaining information from a user; establishing a profile of a user; determining a configuration of a remote unit for a user; determining use of a remote unit by a user having an established profile; and configuring the remote unit utilized by a user to the determined configuration based upon the profile of a user.

Best Available Copy

**TITLE OF THE INVENTION****A SYSTEM AND METHOD FOR PROVIDING REMOTE ACCESS OF INFORMATION TO A USER IN A FAMILIAR CONFIGURATION**

5

**BACKGROUND OF THE INVENTION****1. Field of the Invention**

10        The invention is directed to a system and a method for providing remote access of information to a user in a familiar configuration, to, in turn, facilitate access to information by way of computer to patrons, primarily in the hospitality and entertainment industry. It will be understood that the system is not limited for use in the hospitality and entertainment industry, and that it is equally applicable to other industries and to other  
15        environments.

**2. Background Art**

20        Providing patrons with services, especially when on business trips, vacations or otherwise in locations away from home, has proved challenging. This challenge has only increased in the information age. Travelers today expect to remain connected, reachable and accessible in every corner of the globe.

25        Many travelers have become accustom to carrying a multitude of electronic equipment when traveling, such as cell phones, computers, pagers, facsimile machines, etc. This material difficult to carry when a traveler is constrained by luggage size and weight constraints. Moreover, often the traveler reaches the destination only to find that certain of the electronic equipment does not work while other electronic equipment will require complete reconfiguration.

30        While such remote destinations often include business offices and the like, these offices are of limited use. Often, the user can not access any personal files, email or specialty programs without reconfiguration of the systems of the business office. Thus,

these business offices are sufficient only for emergencies.

Furthermore, travelers are often constrained by a lack of knowledge of their environment. Often travelers must rely on a single concierge to assist with plans, excursions, restaurants, purchasing of goods and services, etc. In many instances, the  
5 knowledge of the concierge and the ability to access the concierge is limited. Thus, not only is the quality of information limited, but the access to the information is quite limited. Additionally, tracking purchases and reservations has often proved tedious.

Thus, it is an object of the invention to provide individuals with a familiar environment in which access to information in situations wherein access to information  
10 has heretofore been limited.

It is another object of the invention to facilitate the communication with others for individuals who are, for example traveling or otherwise away from conventional communication venues.

It is another object of the invention to provide facilities with the ability to assist  
15 patrons with information, services and communication.

These and other objects will become apparent in light of the specification and claims appended hereto.

**SUMMARY OF THE INVENTION**

The invention comprises a system for providing remote access of information to a user in a familiar configuration. The system comprises a remote server, a plurality of 5 remote units selectively placed in communication with the remote server, means for obtaining information from a user, means for establishing a profile of a user, means for determining a configuration of a remote unit for a user, means for determining use of a remote unit by a user having an established profile and means for configuring the remote unit utilized by a user to the determined configuration based upon the profile of a user.

10 In a preferred embodiment, the system further comprises means for providing at least one service to the user. In one such embodiment, the at least one service comprises the providing of email access to the user. In another embodiment, the at least one service comprises the providing of software usage to the user. In one such embodiment, the software comprises one of the group consisting of: word processor, spreadsheet, custom 15 software, financial software and audio/video software.

In another such embodiment, the at least one service further comprises the providing of access to user's data on the remote server. In another such embodiment, the at least one service comprises the providing of video conferencing access. Preferably, the at least one service comprises the purchasing of at least one good or service.

20 Likewise, preferably, the at least one service comprises the reserving of at least one service. In one embodiment, the at least one service comprises the storing of user's data on the remote server.

In a preferred embodiment, the system further comprises means for tracking the at least one service provided to the user. In one such embodiment, the system further 25 comprises means for suggesting at least one service based upon the selected prior services tracked by the tracking means.

In yet another preferred embodiment, the system further comprises means for charging for the at least one service provided to the user.

30 Preferably, the remote unit is associated with the remote server at least partially by way of a wireless connection.

In one embodiment, the information received from the user comprises information

pertaining to at least one of name, address, telephone number, facsimile number, email address and business name.

The invention likewise comprises a method of providing remote access of information to a user in a familiar configuration. The method comprises the steps of:

5    providing a remote server; providing a plurality of remote units selectively placed in communication with the remote server; obtaining information from a user; establishing a profile of a user; determining a configuration of a remote unit for a user; determining use of a remote unit by a user having an established profile; and configuring the remote unit utilized by a user to the determined configuration based upon the profile of a user.

10    The invention further comprises a method of billing for an establishment for services offered to a user of the establishment but provided by other vendors. The method comprises the steps of: providing a remote unit to a user; offering services of other vendors to the user; facilitating the acceptance of an order of services from the user; billing the costs of the services to the patron by the establishment, wherein payment of the

15    costs is made by the user directly to the establishment; and reimbursing the costs of the services to the other vendor by the establishment.

In one embodiment, the method is administered by a provider and the step of billing comprises the steps of: billing the costs of the services by the other vendor to the provider; billing the costs received by the provider to the establishment; and billing the

20    costs received by the establishment to the patron. In such an embodiment, the step of reimbursing the costs of the services comprises the steps of: reimbursing the costs received by the patron to the establishment; reimbursing the costs received by the establishment to the provider; and reimbursing the costs received by the provider to the vendor.

25    Preferably, the method further comprises the accessing of a service fee by at least one of the establishment and the provider.

**BRIEF DESCRIPTION OF THE DRAWINGS**

Fig. 1 of the drawings is a schematic view of the base station and the plurality of remote stations;

5 Fig. 2 of the drawings is a sample snapshot of the display means of one of the remote stations; and

Fig. 3 of the drawings is a flow chart of the operation of the system by the user.

10

**DETAILED DESCRIPTION OF THE DRAWINGS**

While this invention is susceptible to embodiment in many different forms, there is shown in the drawings and will be described below in detail, a specific embodiment with the understanding that the embodiment is to be considered to be an exemplification 5 of the principles of the invention, and the embodiment is not intended to limit the invention to the embodiment illustrated.

Interactive information and ordering system 10 is shown in Fig. 1 as comprising main unit 15, remote unit 20 and server 18. Main unit 15, it is contemplated, comprises a personal computer having the desired speed and capability, storage capacity and 10 communication structures. For example, such a main unit includes means 26 for processing instructions, means 22 for storing data, means 24 for accessing other units (such as servers 18 and the like) and means 28 for two way communication with remote units. One such computer may comprise a PC based machine, such as one having an Intel Pentium Series (I, II, Pro, III) --or its equivalent-- processing means as well as a suitable 15 operating system such as Windows 98, Windows NT/2000 and LINUX operating system. Of course, other systems utilizing other processors and other operating systems such as other forms of UNIX or MacOS are likewise contemplated for use. Additionally, the main unit likewise includes software which will enable the system to communicate with the world wide web (such as a browser) and with the remote stations (such as a network 20 configuration utilizing known protocols). Data storage means 22 may comprise various removable or fixed media, such as hard drives, cd rom drives, jazz drives, and the like.

Accessing means 24 may comprise a communication link with outside servers, through for instance, a NIC. Likewise, accessing means 24 may comprise any number of different means for linking with the world wide web, such as ISDN, T1, DSL, 25 CableModem, as well as conventional modems operating through analog telephone lines at various speeds (i.e. 19,200 baud or 56k baud to name a few). The particular connection of the accessing means is not crucial, although the faster the connection, the more information that can be sent to and received by main unit 15. For certain applications, high speed modems will be required.

30 The means for communicating with the remote units may be accomplished by a variety of systems. For example, and as will be explained in further detail below, the

communication between the base unit and the remote unit can be accomplished by way of radio frequency communication, infrared communication, or by other types of wireless communication. Radio frequency communication can be on various protocols, and is largely dictated by certain variables such as range, terrain and the number of remote units  
5 with which the base unit will communicate. In addition, it is contemplated that the communication means may comprise a hardwired 10 or 100 baseT network interface, a token ring network, or another type of network communication method that is hardwired. Most preferably, a wireless LAN using an 802.11 protocol is contemplated.

Remote unit 20 is shown in Figs. 1 and 2 as including means 42 for displaying  
10 various information, means 44 for allowing user to input various user designated choices, means 46 for communicating with the base station, means 48 for processing and means 49 for providing interactive communication with patrons/users/customers. Most preferably, the remote unit comprises a device having a footprint and display substantially similar to a letter size sheet of paper. Such a device is presently under development by a wide  
15 variety of manufacturers, including but not limited to Hitachi, Sony, S3, Samsung, and National Semiconductor.

Additionally, a PDA format device, such as one which operates under PalmOS or Windows CE may be utilized. Such commercial units are currently sold by Palm, HP, Casio, Toshiba and others. While such units are commercially available and include the  
20 requisite communication means (Palm IR communication, CPDP wireless communication), these units generally include smaller display means which tend to make them less desirable for use in association with the present invention. However, such units are contemplated for use in association with the present system.

As is common with such units, the input means generally includes a touch  
25 sensitive screen which is capable of receiving input from the user. In addition, a stylus or other pointing device can be utilized. In certain embodiments, the input means may include user activated buttons, keys or switches that can be activated by the user. Moreover, when intensive typing is required, a keyboard can selectively be attached via a USB port on remote unit 20.

30 Regardless of the type of unit utilized for remote unit 20, such a unit includes interactive system software which facilitates coordination of the remote unit with

information on the main unit and the remote server, including an email client and a web browser, among others. The remote unit generally includes an operating system comprising LINUX, Windows CE/98/NT/2000, among others. Such a system having the features described below, can be programmed into software code by one having ordinary skill in the art of computer software programming.

The operation of one embodiment of the system is shown in Fig. 3 in flow chart form. Central to the use of the system in any environment is the establishment of user profiles. Since the system is predicated upon providing a user with a familiar and comfortable environment a central profile of each user of the system is created and maintained by remote servers.

To establish a user profile, the first time the user uses a remote unit which is a part of the system, the user will be prompted to provide certain information. Such information may include, among other things, name, title, business, address, telephone number, fax number, cell phone number, user e-mail and e-mail service provider, etc. This information is processed and stored on remote server 28. Once a profile is created, the user is established, and such information is stored and retrievable by any main unit and remote unit with which the user may come into contact with in the future (i.e. when the user stays at another resort, hotel or restaurant which is associated with the system.)

Once the information is entered, the system establishes the user portal space. Specifically, the system creates a web page for the user, reserves server storage space for the user, opens an account for the user and establishes communications links for the user. The web page that is created comprises a personalized space for the user and provides access to the broad range of services offered by the system. Generally, this web page will not change from remote unit to remote unit or from installation to installation so that every time the user accesses a new remote unit, the same environment will be presented. This establishes familiarity and uniformity to the user. The user is provided with server storage space so that any documents, cached web pages, cookies, etc. can be stored and accessed by the user.

An account is opened for the user such that relative to certain services, billing can be made to a central account for review and payment by the user on, for example, a monthly basis.

Communication links are provided to the user so that regardless of where the remote unit may be located, third parties can have a single means of reaching the user. In particular, the user is provided with a telephone number which is unique to that user. The telephone number is associated with the remote server, and is configured so as to be able  
5 to accept voice communication (i.e. voice mail) and data communication (i.e. facsimile transmissions). Accordingly, for someone to send a voice mail or a facsimile to the user, regardless of the user's location, such transmissions can be made to this single telephone number. Once the information is transferred via the transmission, the remote server stores the information (i.e. voice is stored as, for example an AVI or MP3 file and data is stored,  
10 for example, as a JPEG or MPEG file). The stored files are then sent as attachments to the email account of the user. As explained above, the email account of the user is accessible from each remote unit after creation of a profile in the system. Once the profile is created and the various service links have been established, the user can operate the system and receive services from the system.

15 Use of the system will first be described in a hotel environment with the understanding that the system is not limited to a hotel environment, or to the hospitality industry.

In a hotel environment, a main unit can be maintained on the hotel property, and the hotel may be equipped with a plurality of remote units (i.e. one for each room, or one  
20 for each guest). The main unit is placed in communication with remote server 18 so as to be part of the overall system. The remote units are configured so as to default to web pages designed especially for the particular hotel. Such a web page may include, for example, information about the hotel, local restaurants, maps, visitor information, hotel services, etc.

25 Once the user checks into the hotel, the remote unit is provided. The user can then initiate use of the remote unit. Once powered, the remote unit will first request a user identification and password so that the user can login and access his profile. Wherein the user is new to the system, the above-identified steps will be undertaken to create a new profile for that user.

30 Once logged into the system, the user can either access his personal portal, or the portal of the particular hotel. At this point, the user can access the services available from

the remote unit. Each such service will be explained below in detail, with the understanding that the system is not limited to these services, and other services may be provided.

5       The user can, for example access the user's email to retrieve not only text messages sent to the user but also to retrieve voice mails and facsimile transmissions which were sent to the user's established telephone number and transmitted to the user via email attachments.

10      Additionally, the user can review the hotel's services. For example, the hotel web page can provide a means for making reservations at any of the hotel's facilities and restaurants. Such facilities include, for example, the reservation of a treadmill at the hotel fitness center, ordering of room service, the making of reservations at the hotel restaurant (as well as the ordering of items from the menu), the making of reservations for any of the hotel's excursions, etc.

15      The hotels may likewise contract with "preferred" hotel providers, for various services and goods. Such preferred providers may include, for example, specialty shops, clothiers, tour groups, airlines, car rental agencies, etc. Such providers can be accessed by the user from the web page of the hotel, wherein the user can arrange for the purchase of goods or services. Since the providers are associated with the hotel, the goods or the services can be purchased by the user and billed to the hotel room. In this manner, the 20 user need not repeatedly utilize a credit card, and, a single bill can be generated by the hotel at the end of the stay of the guest. Since the communication is preferably real time, the user can access and review the hotel bill on the remote unit at any time. Since the user has logged into the system, and the system knows the user, the system can provide any necessary information to the service provider (such as rewards program numbers and the 25 like).

30      In addition to services provided by the hotel, the user can likewise access various services provided by the system. For example, the user may require the use of certain software such as a word processor, a spreadsheet and the like. In such situations, the user can access such applications from the remote server as necessary. It is contemplated that since the remote unit includes relatively limited storage space (compared to the mass storage capability of the main unit and the remote server), the applications will remain on

the remote server (or on the main unit) and the user will access and use the software through the web browser. The user will have the ability to store the data that has been generated from using the application on the server storage space that was created for the user at the time the user profile was established.

5        Further, the system likewise includes means for viewing various locations through cameras positioned at, for example, the front desk, the lobby, the bar, the pool area and the exercise room. For example, if the user is waiting for someone, and they are to meet in the lobby, the user can wait in the room with the remote unit configured to display the output of the lobby computer. As soon as the individual enters the room, the user can  
10      proceed from his room to the lobby. Similarly, the user can view the camera shot from the exercise room to see if the exercise machines that he or she wishes to use are presently available.

In addition to business application software, the user can likewise access other forms of software. For example, the remote server may include various video games  
15      which can be accessed and played through the web browser of the remote unit. Moreover, a selection of movies (or other audio/video) can be accessed and viewed by the user through the web browser. With high speed connections, it is possible to transmit full stream video (i.e. from a DVD player or from the remote server) to the remote unit.  
Furthermore, the user can access the world wide web and surf the web through the remote  
20      unit.

In embodiments wherein the user can receive high speed communication, it is possible to establish video conferences between the user and the other individuals using the remote unit. In such an embodiment, the remote unit will also include a small digital camera which is generally mounted on the unit itself, or which may be connected to the  
25      unit, by, for example, the USB port of the remote unit.

The service provider (i.e. the provider of the remote units, the main unit and remote server) can establish various payment methods. For example, the service provider can bill the hotel for basic service provided to the hotel, and for services accessed by users of the hotel. This can be done real time by the service provider, wherein the service  
30      provider is linked to the accounting system of the hotel. In this case, the hotel can decide which, if any, costs will be absorbed by the hotel, and which costs will be passed to the

user via the hotel bill.

For example, the hotel may be billed a certain fee for the basic system. The hotel can absorb this cost as part of the basic room rate. With respect to other services, if, for example, the user accesses and watches a movie on the remote unit, the hotel receives a 5 charge from the service provider. With respect to this service, the hotel can access the cost billed by the service provider and add its own service charge. On the other hand, with respect to "preferred" providers, the hotel can simply pass the cost directly to the user without any additional service fee. Of course, the user can pay the bill through the remote unit as well.

10 To enhance the user experience, the system can track the user's preferences and selections over time. In this situation, valuable intelligence can be gathered by the system to aid the user in the future. For example, when the user travels to a new area and accesses the system through a remote unit, the system can suggest restaurants and other services based upon past selections and past purchases of the user. For example, if a user 15 has made dinner reservations at restaurants featuring steak, the system can suggest steak houses in the local vicinity. In this manner, the user can begin to rely on the services provided by the system.

A similar embodiment can be adapted for use in a cruise ship environment. For example, in a cruise ship environment preferred service providers can be established at 20 the various ports of call which will enable a user to make full itineraries from the comfort of the deck or the user's room on the cruise ship well prior to reaching the port of call. Additionally, even though the user is hundreds of miles away from land, the user will be capable of accessing any of the above-described services provided by the system. A similar embodiment can be adapted for use in association with airlines and air travel.

25 The system has applicability in other environments, such as a restaurant or eatery as well as a stadium skybox and the like. In a restaurant environment, the system is a replacement for the menu, and if desired, for the waiter. The system in a restaurant environment includes a multitude of features which enhance the eating experience and which provide for enhanced service by the restaurant.

30 For example, when a user enters a restaurant, the user receives a remote unit which is electronically connected to the base unit through the communication means. The

remote unit through display means and ordering means provides, among other features, a food and drink menu. After logging into the system, the user can access the menu so as to display the restaurant's offerings on the display means. Each item in the menu can be viewed on the display screen. Once viewed, the user can select an item from the display screen by way of the input means. Most preferably, the user merely taps on the desired entry. Once the desired entry is input, the ordering means prompts the display means to display many attributes of the desired choice. Among others, ordering means through the display means can display a photograph of such a dish or drink, the ingredients for the dish or drink (so that the operator can avoid foods or spices he or she dislikes), the total calories for the dish/drink, the history and background of the dish/drink, etc. The user can then determine if this is the dish he wishes to order. Additionally, since the user has logged into the system, and the system is familiar with the user, the system can make meal suggestions to the user.

In certain situations, wherein certain dishes include name brand additives (such as, for example, the Jack Daniels menu series at the popular TGI Friday's, Inc. restaurants), the ordering means interfaces with the advertising means to link the user to the web site or other advertising site of the name brand. As a result, the user, at his remote restaurant seat, can receive information and advertising from, for example, the Jack Daniels web site. This information for the web site can be received directly from the internet by way of the main unit, or, alternatively, the main unit or another unit associated with the main unit can have the information in a cache within the storage means of such a unit. Thus, the user can simultaneously be ordering from a restaurant, and ordering items from the virtual store of the name brand product web site wherein the cost of the item is placed on the bill from the restaurant. Similarly, the user can learn more about the brand name from the web site or from other locally contained information. Thus, the advertising means provides point of purchase advertising.

In addition, when a user selects an item, the ordering means can prompt the display means to display banner ads which highlight foods and beverages that would compliment the item. For example, if a particular wine or wines are rather appropriate to compliment the item, the advertising means can access information pertaining to these wines. Thus, the user can proceed to a virtual winery from the ordering means, to help

pick out the perfect drink for the item. In addition, the advertising means likewise provides links to the advertising sites for the beverages.

Thus, the present system provides for a highly beneficial means for ordering and means for advertising items at the point of purchase. In particular, the advertising  
5 material is displayed to the user as he is at a restaurant ready to purchase food and spirits. In addition, the display is interactive, and the user is capable of receiving a variety of information regarding any item that can be ordered.

The ordering means further includes means for designing a meal. The designing means, when activated by a user, prompts the display means to display a list of possible  
10 ingredients. The user then combines these ingredients as desired to create a custom dish, which the restaurant will then prepare. The designing means can likewise include means for retaining the selected ingredients so that the user can again recreate the dish the next time the user is in the restaurant.

Once the user has made his or her selections, the selections can be entered into the  
15 system, or may be taken manually or electronically by a waiter. In the situation where the user enters the selection into the system, the system can immediately inform the user as to the amount of the check. Thus, the user can alter his or her choices based on the amount of the check. For example, if the user only has a certain budget for the evening, the user can review the total (which can even automatically add a gratuity) and the user can see if  
20 it is within his/her budget. If not, changes to the selections can be made prior to the submission of the order.

After the food is ordered, the user can retain the remote unit to perform other functions. First, the user can continue to utilize the advertising means, which includes  
25 advertisers information, and, which may include access to a certain group of websites or to virtually any website. Additionally, the remote unit include means for viewing certain areas thereof. In particular, various cameras are positioned throughout the restaurant, so that the user can view these areas from his chair. For example, a camera can be positioned in the kitchen, and the user can then watch the cooks as they prepare the user's food. Likewise a camera can be positioned proximate the door so that the user can see if  
30 he has any acquaintances at the bar or on the dance floor.

The ordering means also includes means for summoning the waiter should the user

desire to change his menu selection, or should there be any other issue in which the waiter may be of assistance. Further, the system may include means for alerting the user of certain conditions, such as an alert that his or her food has been prepared, or that the order is currently in process. Not only can the user then be told approximately how long before 5 his or her food will be brought to the table, but the user, knowing that his food is currently in process, can watch the preparation of his food by way of an image on his display that is from the kitchen camera.

Once the food arrives, the user can continue to operate the remote unit, to, for example, order another round of drinks. Such a system may include a separate means for 10 ordering another round of drinks. In such an embodiment, the user can, with the touch of a button order a new round of drinks. It is likewise contemplated that upon ordering the drinks, the advertising means can trigger the display means which indicates that the user will receive a savings or a coupon if the user switches or selects a particular drink. For example, for a user that is ordering vodka tonic drinks, upon a reorder, the advertising 15 means can display a virtual coupon or other display in an attempt to convince the user to try a different vodka (such as a switch from Beefeater to Absolut vodka). Such advertising space offered by the advertising means can be sold to individual advertisers for individual restaurants, or various combinations of restaurants that are on the system.

After eating, the user can utilize the payment coordination means to pay the bill. 20 For example, the system can include means for accepting credit card numbers, and means for accepting signatures. Alternatively, the credit card information can already be linked to the user login, such that, when the user is logged into the system, the payment coordination means is already aware of the user, and already has the user's information on file. Of course, payment may be made through any number of payment methods, such as 25 specific debit cards, credit cards or commonly used debit cards. The restaurant may issue a virtual debit card, such that the user can have a virtual bank account with the particular restaurant. When making the payment, the user can be given options as to the gratuity, and, likewise, the advertising means may provide incentives to come back to the restaurant again. Additionally, the user can choose that the payment coordination means 30 immediately send to his e-mail a copy of the bill for his/her records or for the expense report.

Further, in another embodiment, the payment coordination means further includes means for dividing the bill into various sub-components for each individual. In such an embodiment, each person eating at a table can receive a separate bill, or different individuals can be grouped together. Subsequently, each person or group can separately  
5 pay through the payment coordination means.

The information received from the user as to the menu choices, the advertisements of interest, the information reviewed and any comments of the user can be tracked for various purposes. The records may be tracked and interfaced with the current inventory and accounting software of the restaurant. In addition, the information can be tracked by  
10 the advertising means so that the advertisers can see the effectiveness of the advertising medium.

Once the user is ready to leave the restaurant and the bill is paid, the payment coordinating means includes means for alerting the valet and the coat check location. Thus, as the user reaches the valet, the valet can already have the user's car, or can at least  
15 already be in the process of retrieving the user's car. In addition, the coats of the user's party can already be pulled from the coat racks.

Additionally, the advertising means includes advertisements as to the activities that are available in the vicinity of the hotel. For example, in a city, the advertising means includes information (or can have the ability to access the information from the main unit,  
20 such as through the internet) about the theaters, the ballet, the museums and the sports teams. Thus, the user can then through ordering means plan and coordinate the evenings or the entire stay at his or her leisure from the comfort of the room. The links can facilitate purchase of tickets, directions to the location, among other services.  
25 Additionally, through the ordering means, the user can arrange ground transportation to and from the service (or to and from any other location as desired).

The system through the ordering means can additionally be interfaced with a travel agent or a travel agency wherein the user can check and book his travel arrangements from the hotel. In addition, the user can check on the current flight information from the room.

30 The means for coordinating the payment of the bill for services is incorporated into the system so that the user can check out from his room over the system or pay for

any service through the payment coordinating means. The system presents the current charges on the display for review by the user. Once reviewed, if accurate, the user can enter payment information, and e-mail information, wherein the receipt for payment can be e-mailed to the user upon settlement of the bill.

5        Of course, the system can likewise be utilized in a multitude of various environments, in addition to those that are identified above, and the environments identified above should not be deemed limiting to the scope of the invention. Indeed, the invention can be utilized as an interactive system in a variety of settings to provide information to a patron, and to solicit the patron through advertising. Indeed, the

10      advertising material, in each embodiment, is at the fingertips of the user at the critical decision time – the time when the user decides whether or not to purchase the product or the service. The ability to provide advertisements at the time of purchase greatly enhances the effectiveness of the advertising and the probability that the advertising will yield increased purchases.

15      The foregoing description and drawings merely explain and illustrate the invention, and the invention is not limited thereto, as those skilled in the art who have the disclosure before them will be able to make modifications and variations to the system without departing from the scope of the invention.

**CLAIMS**

What is claimed is:

1. A system for providing remote access of information to a user in a familiar configuration comprising:
  - 5 - a remote server;
  - a plurality of remote units selectively placed in communication with the remote server;
  - means for obtaining information from a user;
  - means for establishing a profile of a user;
- 10 - means for determining a configuration of a remote unit for a user;
- means for determining use of a remote unit by a user having an established profile; and
- means for configuring the remote unit utilized by a user to the determined configuration based upon the profile of a user.

15

2. The system of claim 1 further comprising means for providing at least one service to the user.

3. The system of claim 2 wherein the at least one service comprises the providing of

20 email access to the user.

4. The system of claim 2 wherein the at least one service comprises the providing of software usage to the user.

25 5. The system of claim 4 wherein the software comprises one of the group consisting of: word processor, spreadsheet, custom software, financial software and audio/video software.

30 6. The system of claim 2 wherein the at least one service further comprises the providing of access to user's data on the remote server.

7. The system of claim 2 wherein the at least one service comprises the providing of video conferencing access.
8. The system of claim 2 wherein the at least one service comprises the purchasing of 5 at least one good or service.
9. The system of claim 2 wherein the at least one service comprises the reserving of at least one service.
10. 10. The system of claim 2 wherein the at least one service comprises the storing of user's data on the remote server.
11. The system of claim 2 further comprising means for tracking the at least one service provided to the user.
- 15 12. The system of claim 11 further comprising means for suggesting at least one service based upon the selected prior services tracked by the tracking means.
13. The system of claim 2 further comprising means for charging for the at least one 20 service provided to the user.
14. The system of claim 1 wherein the remote unit is associated with the remote server at least partially by way of a wireless connection.
- 25 15. The system of claim 1 wherein the information received from the user comprises information pertaining to at least one of name, address, telephone number, facsimile number, email address and business name.
16. A method of providing remote access of information to a user in a familiar 30 configuration comprising the steps of:
  - providing a remote server;

- providing a plurality of remote units selectively placed in communication with the remote server;
- obtaining information from a user;
- establishing a profile of a user;

5      - determining a configuration of a remote unit for a user;

- determining use of a remote unit by a user having an established profile; and
- configuring the remote unit utilized by a user to the determined configuration based upon the profile of a user.

10     17.    The method of claim 16 further comprising the step of providing at least one service to the user.

15     18.    The method of claim 17 wherein step of providing a service comprises the step of providing of email access to the user.

19.    The method of claim 17 wherein the step of providing a service comprises the step of providing software for use by the user.

20.    The method of claim 19 wherein the step of providing software comprises the step 20 of providing software from the group consisting of: word processor, spreadsheet, custom software, financial software and audio/video software.

21.    The method of claim 17 wherein the step of providing a service further comprises the step of providing access to user's data on the remote server.

25     22.    The method of claim 17 wherein the step of providing a service comprises the step of providing of video conferencing access.

23.    The method of claim 17 wherein the step of providing a service comprises the step 30 of purchasing at least one good or service.

24. The method of claim 17 wherein the step of providing a service comprises the step of reserving of at least one service.

25. The method of claim 17 wherein the step of providing a service comprises the step of storing user's data on the remote server.

26. The method of claim 17 wherein the step of providing a service comprises the step of providing access to the world wide web.

10 27. The method of claim 17 further comprising the step of tracking the at least one service provided to the user.

28. The method of claim 17 further comprising the step of suggesting at least one service based upon the selected prior services tracked by the tracking means.

15 29. The method of claim 17 further comprising the step of charging for the at least one service offered to the user.

30. The method of claim 29 wherein the step of charging comprises the step of charging an establishment hosting the remote unit

20 31. The method of claim 16 wherein the selective communication comprises, at least in part, a wireless connection.

25 32. The method of claim 16 wherein the information received from the user comprises information pertaining to at least one of name, address, telephone number, facsimile number, email address and business name.

30 33. A method of billing for an establishment for services offered to a user of the establishment but provided by other vendors comprising the steps of:  
- providing a remote unit to a user;

- offering services of other vendors to the user;
- facilitating the acceptance of an order of services from the user;
- billing the costs of the services to the patron by the establishment, wherein payment of the costs is made by the user directly to the establishment; and

5        - reimbursing the costs of the services to the other vendor by the establishment.

34. The method of claim 33 wherein the method is administered by a provider, the step of billing comprises the steps of:

- billing the costs of the services by the other vendor to the provider;
- 10      - billing the costs received by the provider to the establishment; and
- billing the costs received by the establishment to the patron,

and, the step of reimbursing the costs of the services comprises the steps of:

- reimbursing the costs received by the patron to the establishment;
- reimbursing the costs received by the establishment to the provider; and

15      - reimbursing the costs received by the provider to the vendor.

35. The method of claim 34 further comprising the accessing of a service fee by at least one of the establishment and the provider.

1/3

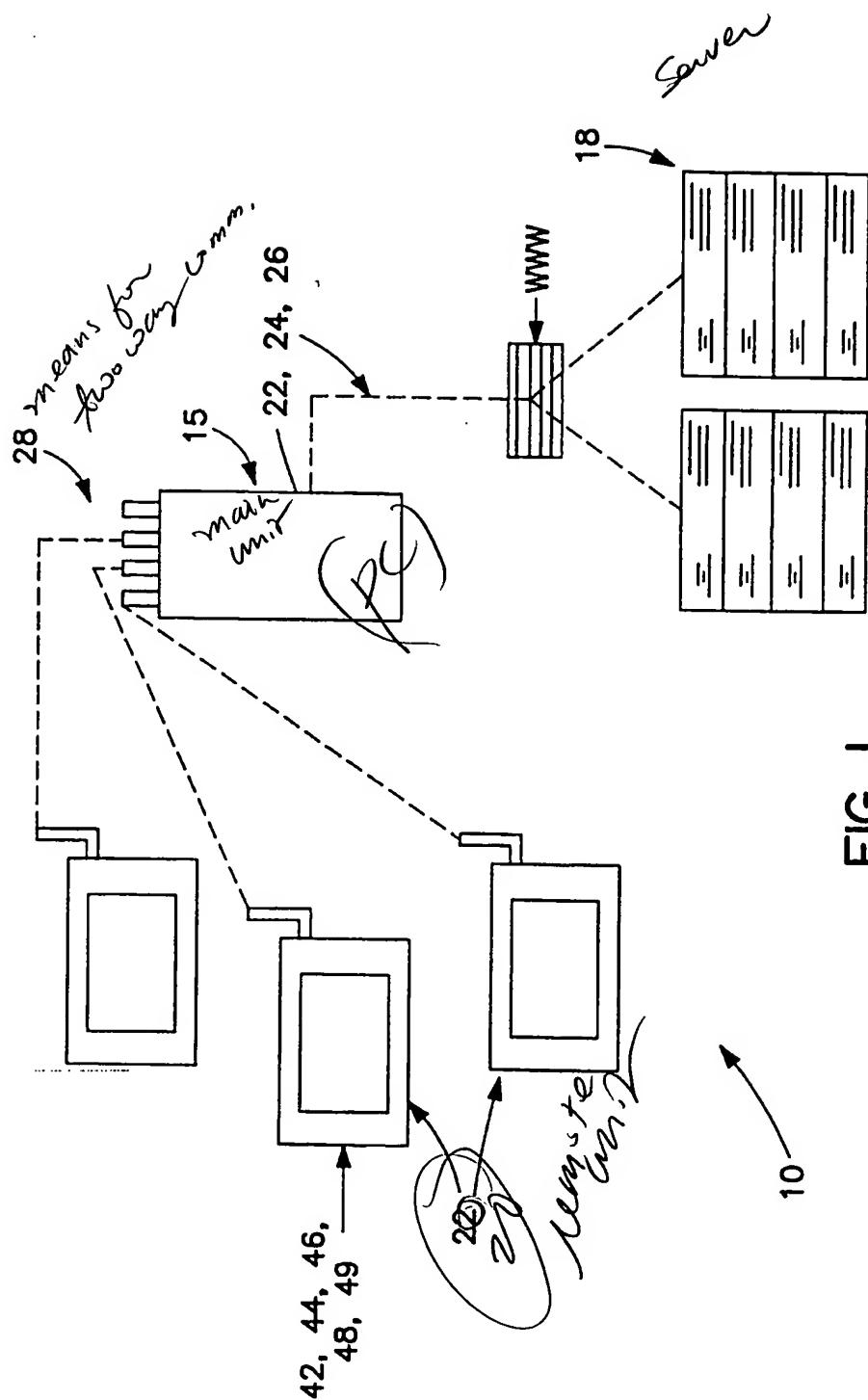


FIG. I

SUBSTITUTE SHEET (RULE 26)

06/17/2004, EAST Version: 1.4.1

2/3

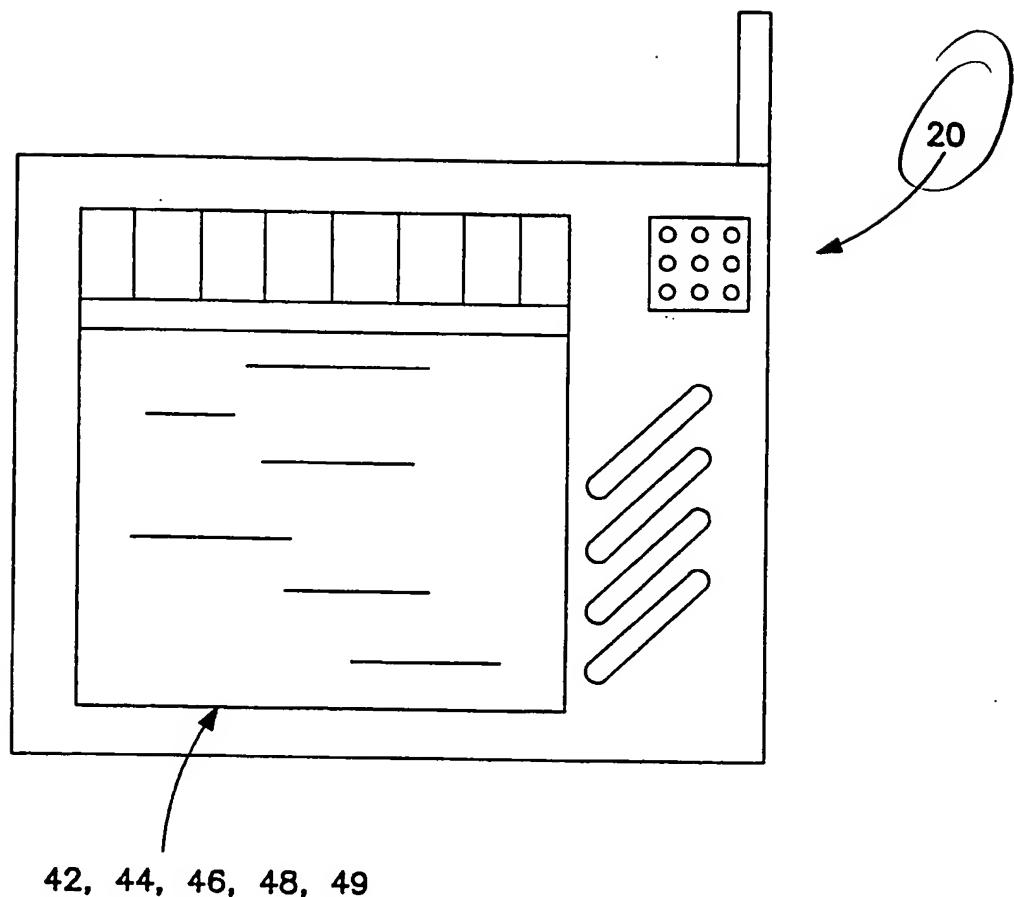


FIG. 2

SUBSTITUTE SHEET (RULE 26)

3/3

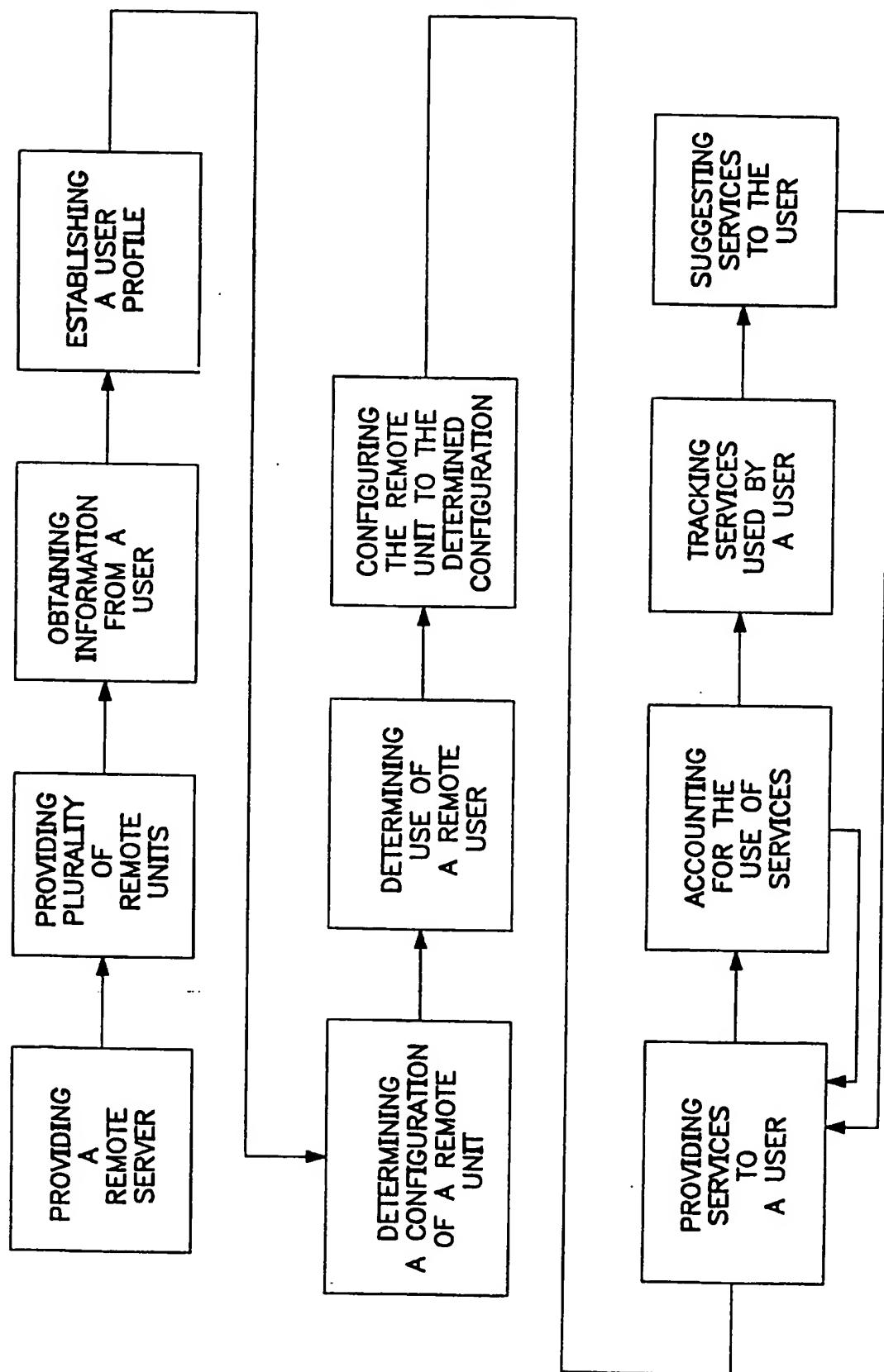


FIG. 3

SUBSTITUTE SHEET (RULE 26)

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER: \_\_\_\_\_**

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**